

### **SECTION 3**

#### **EXISTING PLANS AND DOCUMENTS**

#### 3.1 INTRODUCTION

A review of existing planning documents is essential to understand previous recommendations and coordinate them with the Comprehensive Master Plan. The following are summaries of existing plans that are relevant to recommendations for the Comprehensive Parks Master Plan.

# 3.2 INVENTORY OF SIGNIFICANT NATURAL AREAS OF CATAWBA COUNTY, NORTH CAROLINA 2002

The objective is to identify and describe the significant natural heritage areas of Catawba County as it is critical to inventory these areas in order to protect them. This plan needs to be updated every five to ten years, or when the sites are impacted by development. The following criteria are used to categorize inventoried areas:

- National Significance;
- State Significance;
- Regional Significance; and
- County Significance.

The Natural Heritage Areas in Catawba County are listed below with their corresponding significance. (See Appendix: Attachment 2 – Significant Natural Heritage Areas in Catawba County, NC)

•	Jacob Fork West Corridor	National
•	Bakers Mountain	State
•	Catawba River Corridor	Regional
•	Jacob Fork Aquatic Habitat	Regional
•	Lyle Creek Corridor	Regional
•	Murray's Mill Lake and Upper Balls Creek	Regional
•	Henry Fork River Slopes	County
•	Jacob Fork East Corridor	County
•	Lyle Creek Wetland	County
•	Terrapin Creek Corridor	County
•	Lake Norman Slopes and Shoreline	County



### **Protection Priorities and Recommendations**

The following are summarized recommendations from *An Inventory of Significant Natural Areas of Catawba County, North Carolina 2002*, which are guiding factors in the Catawba County Comprehensive Parks Master Plan. Bakers Mountain, Catawba River Corridor, Jacob Fork West Corridor, and Lyle Creek Corridor are the highest priorities for protection. Future park development should focus on the findings of this inventory to preserve the natural heritage qualities of the County as preservation is a part of the primary mission of Catawba County Parks.

#### **Bakers Mountain**

Bakers Mountain is the largest undisturbed forest in Catawba County. It contains a diversity of high quality natural communities, habitat for populations of rare plant species in the County, and a unique habitat for flora and fauna species that



are uncommon in the County and the Piedmont.

Management techniques must include trail maintenance to reduce erosion. Equestrian uses, and motorized vehicles should be prohibited from the County Parks. Development of this site should be minimized and additional private property should be purchased or protected through

conservation easements by the State or County. This site would make an excellent expanded County park. Efforts should be made to obtain easements to connect Bakers Mountain to the Jacob Fork River.

#### Catawba River Corridor

The Catawba River Corridor is the longest riparian corridor of the upper Catawba River. It provides important habitat for wildlife and flora that are uncommon in the County and the Piedmont. It includes Riverbend Park, which also contains a small pond and wetland, adding to the diversity of habitats along the river. Contiguous property adjoining Riverbend Park should be purchased or protected with conservation easements by the State or County.





Management policies should include prohibition of livestock from entering the river and restoration of the disturbed banks with their native vegetation. Adequate vegetation buffers should be established along agricultural zones and forests allowed to mature. The preservation of the riparian corridor with adjacent slopes and upland forests along the river remains the highest priority.

#### **Jacob Fork West Corridor**

Jacob Ford West Corridor is nationally significant because of the Catawba County Wildlife Club Heartleaf Site. The riparian corridor is probably the least disturbed in the County and contains a diversity of aquatic and terrestrial habitats.

Adequate vegetation buffers should be established along agricultural zones and forests should go through natural succession. The preservation of the riparian corridor with adjacent slopes and upland forests along the river is essential. Protection should be in the form of conservation easements and private land donations to the County.

#### **Jacob Fork East Corridor**

Adequate vegetation buffers should be established along agricultural fields and forests should go through natural succession. The preservation of the riparian corridor with adjacent slopes and upland forests along the river is essential. Initially, protection should be in the form of conservation easements and private land donations to the County.

# Lyle Creek Corridor

Forests adjacent to the creek should be protected from development and allowed to mature. Adequate vegetation buffers should be established along agricultural zones. The preservation of the riparian corridor with adjacent slopes and upland forests along the creek is essential. Preservation of the Lyle Creek Corridor would be enhanced by a passive park presence at strategic locations, including the Bunker Hill Covered Bridge site and the confluence of the creek with the Catawba River.



## Lyle Creek Wetland

It is important to monitor water levels and limit human activity within wetland areas. The use of chemicals in maintaining power line right-of-ways is discouraged. Protection should be in the form of conservation easements and private land donations to the County.

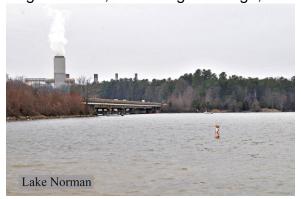
## Murray's Mill

Murray's Mill should establish adequate vegetation buffers. All woodland areas adjacent to the creek should be protected from development and allowed to mature. The dredging and clearing of riparian vegetation on Balls Creek above the lake needs to be prohibited. Preservation of the riparian corridor with adjacent slopes and upland forests along the river is essential. Protection should be in the form of conservation easements and private land donations to the County. Currently, some areas are being preserved by the Catawba County Historical Association.

## **Lake Norman Slopes and Shoreline**

Where possible, all forests adjacent to the shoreline should be protected from development and allowed to mature. The gamelands, other large-acreage, and

undisturbed sites with vegetation should be preserved. increased Having realized development over the past 20 years, this area is attractive for residential development, limiting the opportunity for preservation and public recreation sites. Conservation easements and land donations should be sought from Duke Energy to protect shoreline and adjacent woodlands.



# 3.3 CAROLINA THREAD TRAIL (CTT)

The CTT Plan was adopted by Catawba County in December 2010. Through a collaborative effort between 15 North and South Carolina counties and their municipalities, the plan provides for multi-modal trail connectivity between destinations. Catawba County and municipalities have approximately 126 miles



of potential Carolina Thread trails that are eligible to receive CTT grant money. An additional 112 miles of secondary trails are identified by the Catawba County Carolina Thread Trail committee as important to help connect destinations throughout the County. Blueways with take-out areas are also included in the plan. Existing city and bicycle routes were considered in determining the CTT routes.

# 3.4 GREATER HICKORY RECREATION/TOURISM PLAN 2006 (UNIFOUR) – FOUR COUNTY AREA

The Unifour plan develops a strategy to shift the region's economy by utilizing the area's natural, cultural, and recreational resources for sustainable economic growth and prosperity. The study area includes Catawba, Caldwell, Burke, and Alexander counties. This document recommends regional efforts to create resources that will bring additional tourism dollars to the local economy.

The Unifour study is a strategic document that is region-wide in scope and in many cases does not examine park-specific issues for Catawba County Parks. It gives direction to achieve the highest standards in providing opportunities for outdoor recreation activities and protection of the natural environment within a regional perspective. This regional plan was studied and evaluated in developing proposals and recommendations the Catawba County Comprehensive Parks Master Plan. The Catawba County Comprehensive Parks Master Plan proposes park facilities and improvements in addition to those included in the regional master plan.

The regional Unifour plan lists specific and regional recommendations that incorporate all the counties entailed. The following is a list of recommendations from the Recreation/Tourism Plan that relate specifically to the Catawba County Parks Master Plan.

# **Recommended Regional Initiatives**

# Recreation and Linkage Recommendations

A greenway is a linear open space of land containing bicycle and pedestrian trails. A blueway is an established trail route on a waterway, used for canoeing or kayaking. The following greenway/blueway recommendations were in the original Parks Master Plan and were also carried forward into the Carolina Thread Trail recommendations as blueways and greenways.



- Catawba River Blueway and Greenway The existing trail runs along the length of the Catawba River. The canoe and boating trail was dedicated in May of 2004 and runs approximately 82 miles, from McDowell County to Lake Norman. The trail currently has 24 designated access points and 4 portages around dams.
- Lyle Creek Blueway and Greenway The paddle trail begins where Rock Barn Road (SR 1709) crosses Lyle Creek then flows approximately 6 miles under the Historic Bunker Hill Bridge to the northern reach of Lake Norman.
- Henry River Blueway and Greenway The paddle trail is planned to begin where NC 18 crosses over the Henry River and flows nearly 20 miles to Newton's new Jacobs Fork Park.
- Jacobs Fork Blueway and Greenway Also beginning where NC 18 crosses over Jacobs Fork, this trail is planned to be almost 25 miles ending at the confluence with the Henry River at Newton's Jacobs Fork Park.
- South Fork Blueway and Greenway Begins at the confluence of the Henry River and Jacobs Fork and runs to the Catawba/Lincoln County line.
- Lyle Creek Greenway Independent and combined greenway trail
  which is planned to tie into the Hickory Urban trail network then
  travel though Conover, traverse around Rock Barn Golf and Spa
  along NC 16, St. John's Church Road, and to Rock Barn Road,
  where it joins the Lyle Creek Paddle Trail and follows Lyle Creek
  once again past the Bunker Hill Bridge and Hunsucker Park in the
  Town of Catawba to the Catawba River.
- Newton Greenway/Maiden Link Independent greenway linking the Hickory Urban Trail network then following Clarks Creek through Newton past Jaycee and Southside Parks to Shady Branch in Maiden, then traveling upstream past Rosenwald Park and connecting to the Lincoln County Rails-to-Trails project.

#### **Environmental Recommendations**

 Establish a Conservation Easement for the Jacobs Fork West Corridor – Coordinate with a land conservation organization and the NC Natural Heritage Program to establish a conservation easement for these lands along the Jacob Fork, as delineated by the NC Natural Heritage Program. This area includes riparian (land that is traversed or bounded by a natural watercourse) and upland



areas and includes the nationally significant Catawba County Wildlife Club Heartleaf Site. This site is currently registered with the NC Natural Heritage Program as a Natural Heritage Area.

- Establish a Conservation Easement for the Jacobs Fork East Corridor – Coordinate with a land conservation organization and the NC Natural Heritage Program to establish a conservation easement for these lands along the Jacobs Fork, as delineated by the NC Natural Heritage Program. This area is approximately two miles further downstream from the Jacobs Fork West Corridor.
- Establish a Conservation Easement for the Catawba River Corridor Coordinate with a land conservation organization and the NC Natural Heritage Program to establish a conservation easement for the riparian corridor of Catawba River, east of Riverbend Park in Catawba County. This area is delineated by the NC Natural Heritage Program. This riparian corridor is noted for having diverse avian fauna. Riverbend Park is known regionally as an outstanding area for birding. This plan recommends acquiring parcels to expand Riverbend Park. In addition to park expansion, a conservation easement for this area would significantly benefit ecological habitat and the outdoor recreation importance of Riverbend Park.
- Establish a Conservation Easement for the Lyle Creek Corridor
   Coordinate with a land conservation organization and the NC
  Natural Heritage Program to establish a conservation easement for
  the riparian corridor along Lyle Creek. The NC Natural Heritage
  Program has delineated a corridor extending from Rock Barn Road
  south to the Old Highway 70 overpass. This area includes the
  Bunker Hill Covered Bridge and Roadside Park, which is covered in
  the Land Acquisition recommendations. The corridor should extend
  to the confluence with the Catawba River to enhance ecological
  stability of the corridor, water quality, and the experience for
  paddlers. The wetland at the confluence of Lyle Creek and
  Catawba River should be part of the conservation easement. This
  wetland has also been delineated by the NC Natural Heritage
  Program.

Note: Since the 2006 creation of the *Greater Hickory Recreation/Tourism Plan* in, 43.66 additional acres have been purchased by the state with the understanding Catawba County and Catawba County Historical Association would work together to enlarge Bunker Hill Covered Bridge Park. This land protects a segment of the Lyle Creek corridor to the south and west of the covered bridge.



#### Resource Accessibility & Land Acquisition Recommendations

- Mountain Creek Park Through Duke Energy's relicensing agreement with the Federal Energy Regulatory Commission (FERC), the County acquired a 598-acre tract for public recreation. The tract is located at the mouth of Mountain Creek on Lake Norman and is intended to become a large passive recreation park as part of the Catawba County Park System. Facility development is anticipated to include restrooms, canoe launch, trails, campgrounds, swimming area, and other water-based activities to be maintained by the County. This is the last remaining large acreage tract in the Mountain Creek/Lake Norman area. It is significant in protecting both water quality and wetland habitat, and in providing public access to the cove.
- Acquire State Gamelands in Catawba County Originally a part
  of the FERC agreement (but not approved) are the state
  designated gamelands located on private property north of Hudson
  Chapel Road in eastern Catawba County. This backwater habitat
  for wildlife and waterfowl offers large acreage recreation potential
  and public access to upper Lake Norman. This is an important tract
  of land with water access and environmentally sensitive lands
  suitable for extensive conservation, trail development, and passive
  recreation.
  - Mid-Point Parcels on Lookout Shoals Public boating access is limited on Lake Lookout Shoals from Riverbend Park to the access area near Lookout Shoals Dam. Non-motorized boats (primarily canoes and kayaks) either travel the entire lake or stay within close proximity to those access points. A mid-point access area is designated in the Federal Energy Regulatory Commission (FERC) relicensing, which includes approximately five acres downstream of "the bend" to be developed with a trailer access and boating area including associated parking, restrooms, and primitive camping.
  - Bunker Hill Bridge/Lyle Creek Bunker Hill Covered Bridge is the last remaining "Haupt Improved Lattice Truss" bridge and one of the two remaining covered bridges in the state. It has been accessible by a path from US 70 and approximately two acres of land was available at the bridge for public use. Currently, the Historical Association, State of NC and Catawba County have been working together and purchased an additional 43.66 acres of land to enlarge and develop Bunker Hill Covered Bridge Park. This land also helps protect a segment of the Lyle Creek corridor to the south



and west of the covered bridge. The park will feature the Bunker Hill Covered Bridge, wildlife and wildflowers, including rare plant species, and the Lyle Creek Greenway. The expanded acreage will also garner adequate space to incorporate additional facilities such as a welcome center, restrooms, canoe launch, picnic shelter, hiking/biking trails and potentially other recreational activities.

- Expand Riverbend Park As noted above, Riverbend Park is already known as a significant location for birders in the region. The park is contiguous with a segment of land along the Catawba River that has been identified by the NC Natural Heritage Program as an important riparian corridor due to the richness of avian fauna. Acquisition of additional parcels to expand Riverbend Park would significantly enhance outdoor recreation opportunities. Incorporating additional land into the park could provide more low-impact access to natural areas for residents and birders from throughout the region. An expanded park would coexist nicely with riparian lands under a conservation easement.
- Murray's Mill This historic site is an important cultural asset and many steps have been taken to preserve the former mill and general store. Balls Creek traverses three noteworthy tracts of land that should be acquired to continue to preserve the historical character of the site. The most significant is



the 133-acre tract to the south of the mill, which allows for the expansion of the facilities at the site (including an amphitheater and exhibits) along with a recreated historic home site and barn. These plans are consistent with both the proposed overall site plan and recommendations of the Catawba County Historical Association.

# 3.5 CATAWBA COUNTY – UNIFIED DEVELOPMENT ORDINANCE (UDO)

The Unified Development Ordinance provides a capital expenditure source for parks in Section 44-543. Major subdivisions are required to provide land for public or private parks, sidewalks, trails, greenway, recreation, and open space purposes. Specific requirements are based on the density and size of the overall subdivision. The developer, with the approval of the County, can donate land, or



pay a fee-in-lieu-of land dedication. The fee will be used for new parkland acquisition or capital improvements in the County's existing or expanding parks.

## 3.6 SMALL AREA PLANS (SAPs)

The concept of conducting Small Area Plans for Catawba County was one of sixteen growth strategies resulting from the County's long-range Strategic Growth Plan in 1999. The Growth Plan stated that the SAPs would "explore general development patterns and trends and evaluate public service/facility deficiencies needing attention". This section outlines the process by which the SAPs were accepted and examines each individual SAP as an additional guide in the formation of the Catawba County Comprehensive Parks Master Plan.

#### **Overview**

As part of the County's long-range Strategic Growth Plan, seven Small Area Plans (SAPs) were identified for the evaluation and assessment of growth patterns, public facilities, utilities, and other factors that affect Catawba County. The SAPs, which are now adopted, include Balls Creek, Sherrills Ford, Catawba, St. Stephens/Oxford, Mountain View, Plateau, and Startown. (See Appendix Map 1 – Catawba County Small Area Plans)

Development of the SAPs began as local planning committees in each area assessed their quality and sustainability of life with respect to the following issues:

- Economic Development;
- Natural Resources;
- Cultural Resources:
- Community Facilities and Public Services;
- Housing:
- Land Use and Community Design; and
- Transportation.

As each committee discussed these issues, they developed goals and action statements. They completed their plans by including implementation strategies for their objectives – whether it be through ordinance or policy amendments, modified capital improvement plans, or coordination with other agencies to complete specific tasks. After each committee's SAP was complete, final documents were individually presented to the Catawba County Planning Board and the Catawba County Board of Commissioners for review and acceptance. Through a series of public work sessions and hearings with both boards, all of



the final SAP documents were accepted by the Catawba County Board of Commissioners.

The Guiding Principles in these plans are statements of what the Small Area Plans hope to accomplish in a broad context, based on the analysis of opportunities and constraints for future development of each area.

The remainder of this Section identifies the following criteria in each individual SAP and extracts those portions of the plans, which relate specifically to parks and recreation needs:

- Study Area;
- Demographics/Projections;
- Key Issues;
- Guiding Principles;
- Specific Needs Assessment (as related to Parks & Recreation); and
- Recommendations



# **Balls Creek Small Area Plan (SAP)**

### Study Area (Balls Creek SAP)

The Balls Creek Small Area Plan (BCSAP) study boundary follows the Maiden and Newton Extraterritorial Jurisdiction (ETJ) boundaries to the west; NC Highway 10 on the north; Murray's Mill Road/Buffalo Shoals Road to the east; NC Highway 16 south of Buffalo Shoals Road to the Catawba/Lincoln County line on the east, and then follows the County line west to the Maiden ETJ boundary. The Balls Creek SAP study area encompasses 30,802 acres, including land in dedicated rights-of-way.

## Demographics/Projections (Balls Creek SAP)

The following demographic and projection tables and text have been updated to reflect 2015 data.

As shown in Table 3.6.1 below, the population in 2010 is relatively distributed evenly across the individual age groups in the Balls Creek area. This distribution is similar to that of the County as a whole.

Table 3.6.1 Age of Population, 2010

Age	Cata	wba County	Ва	lls Creek
	Population	% of Population	Population	% of Population
0 to 4	9,670	6.3%	603	5.2%
5 to 17	27,125	17.6%	2,093	18.1%
18 to 44	52,619	34.1%	3,812	33.0%
45 to 64	43,171	28.0%	3,266	28.3%
65 and Over	21,773	14.1%	1,774	15.4%
Total	154,358	100.0%	11,548	100.0%

Source: US Census Bureau, WPCOG Data Center, 2014.



As shown in Table 3.6.2 below, the projected growth rate for the entire county is 10.0%, slightly higher than the growth rate of the Balls Creek study area. The study area's net gain of 1,056 persons represents a 9.1% population gain.

Table 3.6.2 Catawba County SAP Projections From 2010 to 2030

	Catawba	
Year	County	Balls Creek
2010	154,358	11,548
2015	157,872	11,799
2020	161,833	12,073
2025	165,791	12,341
2030	169,751	12,604
Total Growth 2010 to 2030	15,393	1,056
% Change	10.0%	9.1%

Source: US Census Bureau, NC Office of Management and Budget, and WPCOG Data Center, 2014.

# Key Issues (Balls Creek SAP)

Area residents of the Balls Creek SAP met in July of 2001 and identified their likes, dislikes, and future visions of the community. Their concerns follow:

Balls Creek's community has a rural setting with most of the land in open space and farmland. Balls Creek is centrally located to cities and towns and traffic congestion is a concern of the community. Controlling residential growth/density and balancing growth with rural character is also a challenge. Balls Creek has many good schools for students to attend. One concern is that it will be difficult to maintain their high quality of education in the face of overcrowding.

Balls Creek has a strong cultural heritage. There is a concern about public policy and land use.

# Guiding Principles (Balls Creek SAP)

1. Open Space Protection. Preserve open space in new subdivisions.



- 2. Preservation of Natural Features. Where practical, the community's natural terrain, pastures, scenic views, existing vegetation, natural drainage, and bodies of water should be protected and preserved.
- Pedestrian Oriented Development. Ensure that all new development is designed to accommodate and encourage the pedestrian and bicyclist on parity with automobiles and trucks.
- **4. Pedestrian/Bicycle.** An "alternative transportation" system of sidewalks and bikeways should be implemented over the course of several years as higher density development takes place.
- **5. Park Space.** Provide adequate recreational opportunities for all segments of the population.
- 7. Linear Park System. Put into action the long-term construction of a linear park system (with bicycle and/or pedestrian facilities) linking together parks, recreation facilities, residential development, shopping areas, and employment centers.
- 8. Schools in the community. Balls Creek Elementary and Tuttle Middle School should continue their standing as "centers of the community."
- **9. Volunteerism.** The spirit of volunteerism in existing civic organizations should be encouraged as sources of community pride and as providers of recreation options for the community.

# Specific Needs Assessments as related to Parks & Recreation (Balls Creek SAP)

#### 1. Pedestrian and Bicycle System

Balls Creek has virtually no bicycle or pedestrian routes. However, it is now policy of the MPO and NCDOT to evaluate any new road construction project for potential pedestrian needs (i.e. sidewalks and crossover) and bicycle accommodations. The plan calls for the creation of a walking trail from Bandys High School to Mill Creek Middle School.

There are many potential destinations in the Balls Creek district that would benefit from a bike/pedestrian system. Some possible roads where increasing the pavement width to the maximum extent feasible for bicycle routes are as follows:



- Mount Olive Church Road;
- Murray's Mill Road;
- Balls Creek Road;
- NC Highway 10 from the intersection of Murray's Mill Road east to Balls Creek Road;
- West Bandys Cross Road;
- Providence Mill Road;
- Smyre Farm Road;
- Bethany Church Road;
- Little Mountain Road;
- East Maiden Road;
- Water Plant Road: and
- Buffalo Shoals Road.

Note: Since the adoption of the Balls Creek SAP, the Carolina Thread Trail Plan was adopted by Catawba County in December 2010 to identify future multi-modal trail locations. The Western Piedmont Bicycle Plan is currently being created for the Unifour by the Western Piedmont Council of Governments (WPCOG) to identify needed improvements to existing roadways.

#### 2. Parks and Greenways

At the present time, no parks or greenways are located within the Balls Creek Small Area. The County's largest park, Riverbend Park, is located at NC Highway 16 and the Catawba River, with over 450 acres of hiking, biking, and equestrian trails. Bakers Mountain Park contains nearly 200 acres and is located in the western portion of the County, south of Hickory and Interstate 40.

However, the elementary school, churches, and civic organizations, operate some passive and active recreation programs and facilities.

Note: Since the adoption of the Balls Creek SAP, the Carolina Thread Trail Plan was adopted by Catawba County in December 2010 to identify future multi-modal trail locations. The Western Piedmont Bicycle Plan is currently being created for the Unifour by the Western Piedmont Council of Governments (WPCOG) to identify needed improvements to existing roadways.



# Recommendations (Balls Creek SAP)

- Assist property owners of rural farms in preserving those uses by providing information on conservation easements and tax credit measures.
- 2. Within high and medium residential density areas, new construction should implement the following:
  - Open space/cluster subdivision design;
  - Minimum open space requirement; and
  - Density bonuses for providing additional open space beyond minimum requirements.
- **3.** When roads and highways are resurfaced, add pavement to accommodate the construction of bicycle lanes, when appropriate.
- **4.** Begin to design and construct a pedestrian and bicycle system that links the currently disconnected residential developments together.
- **5.** Balls Creek Elementary School should continue to build on its role as an essential resource for the community. It should also be provided with adequate facilities and resources as population increases.
- **6.** Encourage the Catawba County Historical Association (CCHA) to increase public educational efforts for those sites of County and state-wide significance in Balls Creek.

Note: Since the adoption of the Balls Creek SAP, the Carolina Thread Trail Plan was adopted by Catawba County in December 2010 to identify future multi-modal trail locations. The Western Piedmont Bicycle Plan is currently being created for the Unifour by the Western Piedmont Council of Governments (WPCOG) to identify needed improvements to existing roadways.



# **Sherrills Ford Small Area Plan** (SAP)

## Study Area (Sherrills Ford SAP)

The Sherrills Ford District encompasses an approximate 71 square mile area (45,412 acres) in southeastern Catawba County. The district is bounded by Lake Norman and the Catawba River on the east; the



Catawba and Lincoln County lines to the south; NC Highway 16, Buffalo Shoals Road, and Murray's Mill Road on the west; and US Highway 10, the Town of Catawba's Extraterritorial Jurisdiction, and the Catawba River to the north.

### Demographics/Projections (Sherrills Ford SAP)

As shown in Table 3.6.3 below, the population in 2010 is relatively distributed evenly across the individual age groups in the Sherrills Ford area. This distribution is similar to that of the County as a whole.

Table 3.6.3 Age of Population, 2010

Age	Cata	wba County	She	errills Ford
	Population	% of Population	Population	% of Population
0 to 4	9,670	6.3%	662	4.9%
5 to 17	27,125	17.6%	2,253	16.7%
18 to 44	52,619	34.1%	4,082	30.2%
45 to 64	43,171	28.0%	4,576	33.9%
65 and Over	21,773	14.1%	1,929	14.3%
Total	154,358	100.0%	13,502	100.0%

Source: US Census Bureau, WPCOG Data Center, 2014.



The projected growth rate for the County overall is 10.0%, less than half the growth rate of the Sherrills Ford study area. The study area's net gain of 3,120 persons represented 23.1% of the total County population increase of 15,393.

**Table 3.6.4 Catawba County SAP Projections** 

	Catawba	Sherrills
Vaar	• • • • • • • • • • • • • • • • • • • •	
Year	County	Ford
2010	154,358	13,502
2015	157,872	14,203
2020	161,833	14,976
2025	165,791	15,783
2030	169,751	16,622
Total		
Growth	45 000	0.400
2010 to	15,393	3,120
2030		
% Change	10.0%	23.1%

Source: US Census Bureau, NC Office of Management and Budget, and WPCOG Data Center, 2014.

# **Key Issues (Sherrills Ford SAP)**

In August of 2000, area residents of the Sherrills Ford SAP met and discussed their likes, dislikes, and their vision for the community. Their concerns are reflected in the following paragraphs.

Sherrills Ford/Lake Norman is the fastest growing of the small areas identified by Catawba County and it is also the largest (in acreage) of the seven. However, it is the least connected to the rest of Catawba County of any of the small areas. The *lack of connectivity* in this large, diversely populated, fast-growing tract makes this small area the one most likely to have growth-related issues within the next ten years.

The Sherrills Ford small area district also has the largest number of cultural resources of any small area district within the County. These resources are being threatened by the amount of new development in the area.

Trends for the area for the next 20 to 30 years are somewhat contradictory in nature. More people will continue to want to locate here for its rural, open quality; yet the demand for more upscale development and proximity to services



will increase. This will reduce availability and place a premium on rural open space.

### **Guiding Principles (Sherrills Ford SAP)**

- 1. Open Space Protection. Ensure that new development is sensitive to the preservation and protection of open spaces.
- 2. Preservation of Natural Features. Where practical, the community's natural terrain, existing vegetation, natural drainage, and bodies of water should be protected and preserved.
- 3. Pedestrian Oriented Development. Ensure that all new development is made up of walkable neighborhoods, designed to accommodate the pedestrian and bicyclist on parity with automobiles and trucks.
- **4.** "Main Street". Efforts should be made to promote the creation of a pedestrian oriented village center to serve as a focal point of the Sherrills Ford community in Terrell.
- **5. Pedestrian/Bicycle.** An "alternative transportation" system of sidewalks and bikeways should be implemented over the course of several years as higher density development takes place.
- **6. Park Space.** Increase the amount of parkland and recreation facilities to meet the needs of the changing Sherrills Ford population.
- 7. Linear Park System. Put into action the long-term construction of a linear park system (with bicycle and/or pedestrian facilities) linking together parks, recreation facilities, residential development, shopping areas, and employment centers.
- **8. Joint Use Facilities.** Create an environment where public, private, and non-profit organizations work toward the common good through cooperative facility sharing.
- **9. Environmental Recreation and Education.** Develop a broad range of recreational and educational opportunities within a park and open space system, which preserves and enhances the area's landforms, natural features, wildlife habitats, and cultural and historic sites.

Note: Since the adoption of the Sherrills Ford SAP, the Carolina Thread Trail Plan was adopted by Catawba County in December 2010 to identify future multimodal trail locations. The Lake Norman Bicycle Plan was adopted in 2010 by



NCDOT providing an on road bicycle route around Lake Norman. The Western Piedmont Bicycle Plan is currently being created for the Unifour by the Western Piedmont Council of Governments (WPCOG) to identify needed improvements to existing roadways. In addition, 598 acres of land have been obtained in the Sherrills Ford area through the combination of a grant, FERC Relicensing and a development agreement. The land will be used to create future Mountain Creek Park.

# Specific Needs Assessments as related to Parks & Recreation (Sherrills Ford SAP)

#### 1. Pedestrian and Bicycle System

Sherrills Ford has virtually no off road bicycle or pedestrian routes. Some scattered subdivisions do have sidewalks; but, they are primarily internal in nature and do not provide connectivity to, or serve, the surrounding areas.

There are many potential destinations in the Sherrills Ford district that would benefit from a bike/pedestrian system; however, the system would have to be quite substantial – due to the generally scattered nature of development. Some possible origins/destinations are as follows:

- Sherrills Ford Elementary School;
- Mill Creek Middle School;
- Bandys High School;
- Sherrills Ford Library;
- Molly's Backbone, Sandpits, and Corpening Public Game Lands:
- Sherrills Ford Optimist Park;
- Possible Park on Island Point Road;
- Terrell Historic District;
- Local Marinas:
- Local Churches; and
- Balls Creek and Motts Grove Campgrounds.

There are currently no plans for bicycle or pedestrian improvements in Sherrills Ford.

Note: Since the adoption of the Sherrills Ford SAP, the Carolina Thread Trail Plan was adopted by Catawba County in December 2010 to identify future multi-modal trail locations. The Lake Norman Bicycle Plan was adopted in 2010 by NCDOT providing an on road bicycle route around Lake Norman. The Western Piedmont Bicycle Plan is currently being created for the Unifour by the Western Piedmont Council of Governments



(WPCOG) to identify needed improvements to existing roadways. In addition, 598 acres of land have been obtained in the Sherrills Ford area through the combination of a grant, FERC Relicensing and a development agreement. The land will be used to create future Mountain Creek Park.

#### 2. Parks and Greenways

There are no public parks or greenways in the Sherrills Ford District. Without traveling out of the area, citizens rely primarily on open space, public game lands, the lake, and private facilities for most recreational pursuits.

Sherrills Ford Elementary School has some playground equipment and ball fields; however, these facilities are limited for use during school hours or functions. Most youth organized sports are held at the Sherrills Ford Optimist Park and indoor activities/sports are generally held in the school gymnasium.

Hunting and passive recreation are limited to three public game land tracts and private properties – all located on Molly's Backbone Road and Hudson Chapel Road.

Note: Since the adoption of the Sherrills Ford SAP, the Carolina Thread Trail Plan was adopted by Catawba County in December 2010 to identify future multimodal trail locations. The Western Piedmont Bicycle Plan is currently being created for the Unifour by the Western Piedmont Council of Governments (WPCOG) to identify needed improvements to existing roadways. In addition, 598 acres of land have been obtained in the Sherrills Ford area through the combination of a grant, FERC Relicensing and a development agreement. The land will be used to create future Mountain Creek Park.

# Recommendations (Sherrills Ford SAP)

- **1.** Within *rural* residential density areas, new construction should implement the following:
  - Open space/cluster subdivision design;
  - Minimum open space requirement;
  - Density bonuses for providing additional open space beyond minimum requirements; and
  - Buffering along the road frontage



- 2. Within *medium* residential density areas, a minimum percentage of open space should be required for new developments in order to preserve the natural features and protect water quality.
- **3.** Within *high* residential density areas, minimum open space should be required.
- 4. As new school facilities are constructed, locate them contiguous to one another in order to allow for shared facilities, such as ball fields, media centers, etc.
- **5.** Explore with Duke Energy the possibility of making various game land areas and other holdings available for passive recreation use.
- **6.** When roads and highways are resurfaced, add pavement to accommodate the construction of bicycle lanes, when appropriate.
- 7. Begin to design and construct a lake-oriented pedestrian and bicycle system that links the currently disconnected lake-area neighborhoods together.
- **8.** The County should evaluate funding options, such as the state's Wetlands Restoration Fund and the Parks & Recreation Trust Fund (PARTF).
- **9.** Encourage partnerships between local organizations/corporations to increase recreation opportunities.

Note: Since the adoption of the Sherrills Ford SAP, the Carolina Thread Trail Plan was adopted by Catawba County in December 2010 to identify future multimodal trail locations. The Western Piedmont Bicycle Plan is currently being created for the Unifour by the Western Piedmont Council of Governments (WPCOG) to identify needed improvements to existing roadways. In addition, 598 acres of land have been obtained in the Sherrills Ford area through the combination of a grant, FERC Relicensing and a development agreement. The land will be used to create future Mountain Creek Park.



## Catawba Small Area Plan

# Study Area (Catawba SAP)

The Catawba study area encompasses an approximate 45,412 acres in the mid portion of eastern Catawba County. The district is bounded by Interstate 40 on the north; and the Town of Catawba and the Catawba River on the east; NC Highway 10 on the south; and the cities of Newton and Claremont on the west. A significant natural feature bordering the study area is the Catawba River.

# Demographics/Projections (Catawba SAP)

As shown in Table 3.6.5 below, the population in 2010 is relatively distributed evenly across the individual age groups in the Catawba SAP area. This distribution is similar to that of the County as a whole.

Table 3.6.5 Age of Population, 2010

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Age	Cata	wba County	C	atawba
	Population	% of Population	Population	% of Population
0 to 4	9,670	6.3%	178	6.7%
5 to 17	27,125	17.6%	522	19.7%
18 to 44	52,619	34.1%	873	33.0%
45 to 64	43,171	28.0%	788	29.8%
65 and Over	21,773	14.1%	283	10.7%
Total	154,358	100.0%	2,644	100.0%

Source: US Census Bureau, WPCOG Data Center, 2014.

As shown in Table 3.6.6 below, the projected growth rate for the County overall is 10.0%; slightly higher than the growth rate of the Catawba SAP area. The study area's net gain of 248 persons represents a 9.4% population gain.



**Table 3.6.6 Catawba County SAP Projections** 

	Catawba	
Year	County	Catawba
2010	154,358	2,644
2015	157,872	2,703
2020	161,833	2,768
2025	165,791	2,830
2030	169,751	2,892
Total Growth 2010 to 2030	15,393	248
% Change	10.0%	9.4%

Source: US Census Bureau, NC Office of Management and Budget, and WPCOG Data Center, 2014.

# Key Issues (Catawba SAP)

Area residents of the Catawba SAP met in May of 2003 and identified their likes, dislikes, and future visions of the community. As a result of their discussion, the following broad issues were identified:

- Traffic;
- Lack of water and sewer utilities;
- Need for community recreation;
- Loss of farmland and open space; and
- Over-development.

# Guiding Principles (Catawba SAP)

- 1. Reserve open space in new subdivisions.
- 2. Preserve open space, pastures, and scenic views.
- **3.** Provide safe alternatives for pedestrians.
- **4.** Provide safe options for bicyclists.
- **5.** Provide adequate recreational activities for all segments of the population.
- **6.** Provide adequate open space and recreational facilities on a neighborhood basis.



# Specific Needs Assessments as related to Parks & Recreation (Catawba SAP)

#### 1. Pedestrian System

Presently, Catawba County does not require sidewalk construction in new developments. In general, the Catawba SAP area lacks a pedestrian system with sidewalk connections between residential areas. However, it is now policy of the Metropolitan Planning Organization (MPO) – formed by Hickory, Newton, and Conover – and the North Carolina Department of Transportation (NCDOT) to evaluate any new road construction project for potential pedestrian needs (i.e., sidewalks and crossovers) and bicycle accommodations.

### 2. Bicycle System

The Catawba SAP study area does not currently have an integrated system of bicycle trails. NCDOT has funded a Bicycle Route Map and signing project that has been underway since the summer of 2001. In compliance with NCDOT's policy, future road widening projects should be evaluated for their potential to provide bicycle lanes.

Note: Since the adoption of the Catawba SAP, the Carolina Thread Trail Plan was adopted by Catawba County in December 2010 to identify future multi-modal trail locations. The Western Piedmont Bicycle Plan is currently being created for the Unifour by the Western Piedmont Council of Governments (WPCOG) to identify needed improvements to existing roadways.

#### 3. Parks and Greenways

Currently, there are no county-owned parks within the study area. However, the Catawba County Historical Association (CCHA) does own and operate Connor's Park, located in the study area along Highway 70. This park includes a creekside trail to the last original covered bridge in North Carolina. Recently, the County and the Historical Association were awarded a transportation grant to pave the parking area and make other improvements to the site. The City of Claremont operates Francis Sigmon Park – located on Highway 70 west of the study area. It contains ball fields, a walking trail, tennis courts, and picnic shelters. In addition, the Town of Catawba recently was awarded a grant to purchase property from the local Optimists to develop its first municipal park, adjacent to Lyle Creek. Since that time, Hunsucker Park has been completed.



Murray's Mill, the historic site of the grindstone, mill pond, and general store, is located just south of the Catawba planning area in the Balls Creek community.

Riverbend Park, located within the St. Stephens/Oxford Small Area along the Catawba River, offers a variety of passive recreational activities. This was the first county-owned and operated park. Riverbend Park includes over 450 acres of land with hiking, bicycle trails, a dog park, fishing, and canoeing. Riverbend Park also provides picnic facilities and an observation deck on the Catawba River. In June 2002, the County opened a second park atop Baker's Mountain in the Mountain View SAP. Both parks are an easy drive from the Catawba study area.

## Recommendations (Catawba SAP)

- 1. New residential subdivisions should incorporate the cluster design, which preserves open space and rural character.
- 2. All major subdivisions should provide open space that is easily accessible and is usable for recreation.
- 3. Determine the feasibility of a greenway from the Bunker Hill Covered Bridge to the rest area on Interstate 40.
- 4. Determine the feasibility of a greenway from the Bunker Hill Covered Bridge along Lyle Creek to the Town of Catawba Park, continuing through the Town of Catawba to the Catawba River.
- The Catawba SAP supports the bicycle routes that have been submitted to NCDOT for approval. However, due to safety concerns, the bicycle route along Boggs Road should not be designated until the travel lanes are widened. The bicycle route for B & B Road/Hewitt Road would not be designated until the connector road is constructed.
- **6.** Encourage and possibly create public-private partnerships to develop parks and recreation facilities that meet the needs of all population segments.

Note: Since the adoption of the Catawba SAP, the Carolina Thread Trail Plan was adopted by Catawba County in December 2010 to identify future multi-modal trail locations. The Western Piedmont Bicycle Plan is currently being created for the Unifour by the Western Piedmont Council of Governments (WPCOG) to identify needed improvements to existing roadways.



# St. Stephens/Oxford Small Area Plan

# Study Area (St. Stephens SAP)



The St. Stephens/Oxford Small Area Plan (SAP) study area boundary follows the Catawba River to the north and east; the municipal limits of Catawba, Claremont, and Conover to the south; and the municipal limits of Hickory to the west. The study area encompasses approximately 30,846 acres.

# Demographics/Projections (St. Stephens SAP)

As shown in Table 3.6.7 below, the population in 2010 is relatively distributed evenly across the individual age groups in the St. Stephens area. This distribution is similar to that of the County as a whole.

Table 3.6.7 Age of Population, 2010

Age	Cata	wba County	St. Ste	phens/Oxford
	Population	% of Population	Population	% of Population
0 to 4	9,670	6.3%	1,402	6.4%
5 to 17	27,125	17.6%	4,261	19.5%
18 to 44	52,619	34.1%	7,415	33.9%
45 to 64	43,171	28.0%	6,157	28.1%
65 and Over	21,773	14.1%	2,661	12.2%
Total	154,358	100.0%	21,896	100.0%

Source: US Census Bureau, WPCOG Data Center, 2014.

As shown in Table 3.6.8 below, the projected growth rate for the County overall is 10.0%; lower than the growth rate of the St Stephens study area. The study area's net gain of 2,630 persons represents a 12.0% population gain.



Table 3.6.8 Catawba County SAP Projections

	Catawba	
Year	County	St. Stephens/Oxford
		•
2010	154,358	21,896
2015	157,872	22,504
2020	161,833	23,177
2025	165,791	23,852
2030	169,751	24,526
Total		
Growth	45 000	0.000
2010 to	15,393	2,630
2030		
% Change	10.0%	12.0%

Source: US Census Bureau, NC Office of Management and Budget, and WPCOG Data Center, 2014.

## Key Issues (St. Stephens SAP)

As a result of area residents meeting together in October of 2000, the following concerns were expressed with regard to the future of the St. Stephens community:

St. Stephens/Oxford's community has a rural setting. Most of the land is open space and farmland. There is a concern that this farmland and open space will be lost, and the area will become congested.

There is a need for public water in the St. Stephens/Oxford area.

# Guiding Principles (St. Stephens SAP)

- 1. Open Space Protection. Maintain a rural, un-congested setting.
- **2. Preservation of Natural Features.** Protect natural features (i.e. trees, lakes, fields) that contribute to the rural atmosphere.
- **3. Farmland protection.** Encourage farmland preservation.
- **4. Pedestrian Oriented Development.** Ensure that all new development is designed to accommodate the pedestrian and bicyclist on parity with automobiles and trucks. Also, provide a safe environment for pedestrians en route to schools, churches, etc.



- **5. Safer Roads.** Establish safer roads for drivers, pedestrians, and bicyclists. Also, reduce traffic congestion.
- **6. Pedestrian/Bicycle.** An "alternative transportation" system of sidewalks and bikeways should be implemented over the course of several years as higher density development takes place.

Note: Since the adoption of the St. Stephens/Oxford SAP, the Carolina Thread Trail Plan was adopted by Catawba County in December 2010 to identify future multi-modal trail locations. The Western Piedmont Bicycle Plan is currently being created for the Unifour by the Western Piedmont Council of Governments (WPCOG) to identify needed improvements to existing roadways.

- **7. Park Space.** Provide adequate recreational opportunities for all segments of the population.
- **8. Environmental Recreation and Education.** Develop a broad range of recreational and educational opportunities within a park and open space system, which preserves and enhances the area's landforms, natural features, and wildlife habitats.
- **9. Rivers.** Protect water quality for future generations. Preserve the scenic quality of the river corridor. Utilize rivers for environmentally sound recreational activities.
- **10. Cultural Resources.** Recognize and protect cultural resources.

# Specific Needs Assessments as related to Parks & Recreation (St. Stephens SAP)

#### 1. Pedestrian and Bicycle System

In general, St. Stephens/Oxford lacks a pedestrian system offering options for connectivity between residential areas and commercial developments. However, it is now the policy of the MPO and NCDOT to evaluate any new road construction project for potential facilities (i.e. sidewalks and crossovers) and bicycle accommodations.

Sidewalks should be requested on state roads when they are widened. Sidewalks on the following roads could tie in with existing or planned sidewalks in Conover, Claremont, and Hickory:



- County Home Road;
- Rock Barn Road;
- C & B Farm Road;
- Lee Cline Road:
- St. Johns Church Road;
- NC Highway 16; and
- Sipe Road

The St. Stephens/Oxford study area also does not currently have an integrated system of bicycle trails. Riverbend Park offers a system of offroad bicycle trails. In compliance with NCDOT's policy, the Springs Road and NC Highway 16 road widening projects should be evaluated for their potential to provide bicycle lanes connecting with Riverbend Park.

Increase the pavement width to the maximum extent feasible along the following roads for bicycle routes:

- Oxford School Road:
- Riverbend Road:
- Rest Home Road; and
- County Home Road

Note: Since the adoption of the St. Stephens/Oxford SAP, the Carolina Thread Trail Plan was adopted by Catawba County in December 2010 to identify future multi-modal trail locations. The Western Piedmont Bicycle Plan is currently being created for the Unifour by the Western Piedmont Council of Governments (WPCOG) to identify needed improvements to existing roadways.

#### 2. Parks and Greenways

Riverbend Park is located within the study area along the Catawba River and offers a variety of passive recreational activities. This is the first County-owned and operated park with the second park on Bakers Mountain, which opened June 2002. Riverbend Park includes over 450 acres of land with hiking, bicycle trails, dog park, fishing, and canoeing. Riverbend Park also provides picnic facilities and an observation deck on the Catawba River. The schools, churches, and some private organizations operate other passive and active recreational facilities. Currently there are no greenways within the St. Stephens/Oxford study area.



# Recommendations (St. Stephens SAP)

- 1. Protect rural character and open space by requiring dedication of open space within subdivisions.
- **2.** Evaluate where roads need to be widened and traffic signals placed.
- 3. Continue to use school facilities for public recreation activities.
- **4.** When roads and highways are resurfaced, add additional pavement to accommodate the construction of bicycle lanes, when appropriate.
- **5.** Begin to design and construct a pedestrian and bicycle system that links the currently segregated residential developments together.
- 6. A trail connection should be made from the Oxford access on Lake Hickory to Riverbend Park. The possibility of a midway access point, for canoeing, between Riverbend Park and the Lookout Access should also be examined.
- 7. Create scenic corridors by utilizing rivers, creeks, and floodways for open space planning. Create and implement design standards for recreational facilities located on the lakes and rivers to protect water quality and scenic beauty.

Note: Since the adoption of the St. Stephens/Oxford SAP, the Carolina Thread Trail Plan was adopted by Catawba County in December 2010 to identify future multi-modal trail locations. The Western Piedmont Bicycle Plan is currently being created for the Unifour by the Western Piedmont Council of Governments (WPCOG) to identify needed improvements to existing roadways.



### Mountain View Small Area Plan

## Study Area (Mountain View SAP)



The Mountain View Small Area Plan study area boundary follows the Burke/Catawba County border to the west; the unincorporated area outside of Long View, Brookford, and Hickory to the north; Robinwood Road and Zion Church Road to the east; Sandy Ford Road between Robinwood and Zion Church Roads to the south; Highway 10 between Zion Church Road and Highway 127 to the south; and Greedy Highway between Highway 127 and the Burke/Catawba County line to the south. The study area encompasses 20,035 acres.

# Demographics/Projections (Mountain View SAP)

As shown in Table 3.6.9 below, the population in 2010 is relatively distributed evenly across the individual age groups in the Mountain View area. This distribution is similar to that of the County as a whole.

Table 3.6.9 Age of Population, 2010

Age	Cata	wba County	Mou	ntain View
	Population	% of Population	Population	% of Population
0 to 4	9,670	6.3%	713	6.0%
5 to 17	27,125	17.6%	2,355	19.8%
18 to 44	52,619	34.1%	3,887	32.7%
45 to 64	43,171	28.0%	3,586	30.2%
65 and Over	21,773	14.1%	1,343	11.3%
Total	154,358	100.0%	11,884	100.0%

Source: US Census Bureau, WPCOG Data Center, 2014.



As shown in Table 3.6.10 below, the projected growth rate for the County overall is 10.0%; approximately half the growth rate of the Mountain View study area. The study area's net gain of 2,328 persons represents a 19.6% population gain.

Table 3.6.10 Catawba County SAP Projections

	Catawba	Mountain
Year	County	View
2010	154,358	11,884
2015	157,872	12,419
2020	161,833	13,002
2025	165,791	13,601
2030	169,751	14,212
Total Growth 2010 to 2030	15,393	2,328
% Change	10.0%	19.6%

Source: US Census Bureau, NC Office of Management and Budget, and WPCOG Data Center, 2014.

# Key Issues (Mountain View SAP)

Area residents of the Mountain View SAP met in June of 2000 and discussed likes, dislikes, and their visions for the future of their community, as follows:

Rapid commercialization along NC Highway 127 is resulting in traffic congestion and unattractive development.

Housing developments are replacing farms with the consequent loss of open space, scenic topography, and rural character.

Schools are overcrowded.

Additional recreational opportunities are needed.

Encroaching development is threatening the scenic location of Bakers Mountain.

# **Guiding Principles**

- **1.** Preserve rural character.
- 2. Protect Bakers Mountain from undesired development.



- **3.** Preserve the remaining farms and/or explore opportunities for conversion to preserved open space.
- 4. Protect scenic vistas.
- **5.** Provide greenways and trails that link with sidewalks.
- **6.** Promote road-sharing with bicyclists.
- 7. Increase pavement width on designated roads to accommodate bicyclists.
- **8.** Offer off-road bicycling options.
- **9.** Provide additional recreation opportunities for all age groups.
- **10.** Promote cultural events and facilities.
- **11.** Combine passive recreation and open space preservation interests.
- **12.** Link recreational facilities with residential developments.
- **13.** Preserve the scenic quality of river corridors.
- **14.** Utilize river for environmentally sound recreation activities.
- **15.** Provide recreation opportunities.
- **16.** Preserve open space.

Note: Since the adoption of the Mountain View SAP, the Carolina Thread Trail Plan was adopted by Catawba County in December 2010 to identify future multimodal trail locations. The Western Piedmont Bicycle Plan is currently being created for the Unifour by the Western Piedmont Council of Governments (WPCOG) to identify needed improvements to existing roadways.

# Specific Needs Assessments as related to Parks & Recreation (Mountain View SAP)

#### 1. Pedestrian System

The City of Hickory requires sidewalks in all new developments. Hickory has jurisdiction over several parcels along Highway 127 in the Mountain View area. New developments within Hickory's jurisdiction are required to



install sidewalks though they will not necessarily connect to other sidewalks at this time. Hickory also adopted a sidewalk plan that encourages linking sidewalks and greenways. In general, Mountain View lacks a pedestrian system offering options for connectivity between residential areas and commercial developments.

#### 2. Bicycle System

Due to the rural nature of the outlying areas, Mountain View is a popular area for bicyclists. To date, the MPO has installed "Share the Road" signs on Robinson Road, Sandy Ford Road and Zion Church Road. The NCDOT has also funded a Bicycle Route Map and signing project that will begin in late 2001 with expected completion in one year. A system of offroad bicycle trails does not exist in Mountain View.

Note: Since the adoption of the Mountain View SAP, the Carolina Thread Trail Plan was adopted by Catawba County in December 2010 to identify future multi-modal trail locations. The Western Piedmont Bicycle Plan is currently being created for the Unifour by the Western Piedmont Council of Governments (WPCOG) to identify needed improvements to existing roadways.

## 3. Parks and Greenways

School and church facilities as well as Huffman Park comprise the recreational facilities in the Mountain View study area. The Mountain View Recreation Association operates Huffman Park, located on Highway 127, and organizes leagues for team sports.

In June 2002, Catawba County opened a passive recreation park on Bakers Mountain. The Bakers Mountain Park includes 196 acres of passive recreation opportunities for residents of Catawba County and surrounding areas. Of the 196 acres, only 8.8 acres are disturbed to provide 25 parking spaces, picnic areas, and scrub growth removal from meadow areas. Six miles of trail with one-quarter mile paved handicap accessible trail are provided.

# Recommendations (Mountain View SAP)

1. Implement a sidewalk ordinance. Areas with the greatest need should be a priority, including urbanized areas, major roads, schools, and parks. The sidewalk ordinance should require new developments on major thoroughfares, which provide sidewalks and bicycle lanes on the



thoroughfare frontage to connect with existing or proposed sidewalks and bicycle lanes.

- 2. Develop a plan to create a greenway for pedestrians and bicyclists. The preferred routes for the greenways would be along the Henry and Jacob Forks Duke Energy rights-of-way and Bakers Mountain.
- **3.** Implement a greenway plan.
- 4. Create linkages between residential, commercial and industrial developments. Ideally, commercial and residential development would be connected to public institutions (i.e. Mountain View Elementary School) and recreation facilities.
- **5.** New residential subdivisions should include, where appropriate, the dedication of land(s) for schools, parks and passive recreation uses needed to serve the development's new residents.
- 6. Preserve areas in floodplains and land around such known resources as the Jacobs Fork River, the Henry Fork River, Hop Creek and Bakers Mountain.
- 7. Educate property owners of rural farms on ways of preserving those uses by providing information on conservation easement and tax credit measures.
- **8.** Continue to support the development of County park facilities on Bakers Mountain.
- 9. Acquire land or increase pavement on existing roads to construct bicycle lanes connecting Bakers Mountain Park and the Henry Fork Regional Recreation Park
- **10.** Provide canoe and raft portage port on the Henry Fork and Jacobs Fork.
- **11.** Create trails along the Henry and Jacobs Forks to accommodate the needs of hikers, bicyclists and equestrians.
- 12. Require new developments on major thoroughfares (i.e. NC Highway 127, Zion Church Road, Bethel Church Road, Wallace Dairy Road) to provide sidewalks and bicycle lanes on the thoroughfare frontage to connect with existing or proposed sidewalks and bicycle lanes.
- **13.** A sidewalk ordinance should be implemented to require new developments on major thoroughfares to provide sidewalks and bicycle



lanes on the thoroughfare frontage to connect with existing or proposed sidewalks and bicycle lanes.

- **14.** Set as a priority the purchase of additional land on Bakers Mountain for future expansion of the park.
- **15.** Design and implement a recreation/open space plan to link Bakers Mountain Park with Henry Fork Regional Recreation Park.

Note: Since the adoption of the Mountain View SAP, the Carolina Thread Trail Plan was adopted by Catawba County in December 2010 to identify future multimodal trail locations. The Western Piedmont Bicycle Plan is currently being created for the Unifour by the Western Piedmont Council of Governments (WPCOG) to identify needed improvements to existing roadways.



## Plateau Small Area Plan

## Study Area (Plateau SAP)

The Plateau study area encompasses an approximate 32,854 acres (including right-of-ways) in southwestern Catawba County, west of the Startown area and south of the Mountain View area. Bisected by NC Highway 10, which traverses the planning area from east to southwest, the Plateau area is bound by Burke County on the west; Greedy Highway to the north; the NC Highway 321 Bypass on the east; and Lincoln County to the south. The most significant natural feature in the area is the Jacobs Fork River, which joins with the Henry Fork River just east of the planning area to flow south into Lincoln County as the South Fork of the Catawba River.

### Demographics/Projections (Plateau SAP)

As shown in Table 3.6.11 below, the population in 2010 is relatively distributed evenly across the individual age groups in the Plateau area. This distribution is similar to that of the County as a whole.

Table 3.6.11 Age of Population, 2010

Age	Catawba County		Plateau	
	Population	% of Population	Population	% of Population
0 to 4	9,670	6.3%	300	5.7%
5 to 17	27,125	17.6%	931	17.7%
18 to 44	52,619	34.1%	1,645	31.3%
45 to 64	43,171	28.0%	1,662	31.6%
65 and Over	21,773	14.1%	721	13.7%
Total	154,358	100.0%	5,259	100.0%

Source: US Census Bureau, WPCOG Data Center, 2014.

As shown in Table 3.6.12 below, the projected growth rate for the County overall is 10.0%; slightly higher than the growth rate of the Plateau study area. The study area's net gain of 521 persons represents a 9.9% population gain.



#### **Table 3.6.12 Catawba County SAP Projections**

	Catawba	
Year	County	Plateau
2010	154,358	5,259
2015	157,872	5,379
2020	161,833	5,514
2025	165,791	5,648
2030	169,751	5,780
Total Growth 2010 to 2030	15,393	521
% Change	10.0%	9.9%

Source: US Census Bureau, NC Office of Management and Budget, and WPCOG Data Center, 2014.

#### Key Issues (Plateau SAP)

Plateau is rural in nature, with vast amounts of open space and very little congestion. Traditionally a farming community, it remains very family-oriented, with good schools and protective services.

Area residents of the Plateau SAP met in August of 2004 and participated in small group discussions to identify their likes, dislikes, and future visions of the community. As a result of their interaction, the following broad, categorical issues emerged:

- Traffic, especially near NC Highway 10 and near all four schools;
- Overcrowded schools;
- Loss of farmland and open space to residential development;
- Lack of recreation programs, especially for children;
- Balancing the "pressure for growth" with the "existing rural quality of life":
- Lack of commercial development; and
- Inadequate code enforcement.



#### Guiding Principles (Plateau SAP)

- 1. Land Use and Community Design. When planning development, balance growth with the community's rural character. Encourage aesthetically pleasing designs, without negatively impacting air quality. Include pedestrian options such as sidewalks, walking trails, and bike paths. Limit commercial/industrial sites to appropriate, specific areas with the use of mixed-use development and buffers. Preserve open space, agriculture and natural resources, while developing passive recreation.
- **Transportation.** Improve communication with NCDOT. Address safety, congestion, growth, policies, stormwater drainage, and connectivity. Increase pedestrian, bicycle, and transit opportunities.
- 3. Community Facilities and Public Services. Provide greater accommodation for school students in community-based areas sharing facilities for recreation, etc. Maintain existing library and emergency services and plan for expansion. Create additional opportunities for passive recreation in parks and greenways, including conservation easements or greenways along the Jacobs Fork River. Take a cooperative, regional approach in planning future water and sewer infrastructure.
- 4. Natural and Cultural Resources. Preserve water quality, open space, wildlife habitat, and rural characteristics. Encourage conservation easements or greenways along the Jacobs Fork River. Create additional active/passive recreational opportunities with the use of school facilities. Maintain the existing cultural resources local/national historic sites, pottery traditions, and craft shops.

# Specific Needs Assessments as related to Parks & Recreation (Plateau SAP)

#### 1. Pedestrian System

In general, the Plateau SAP area lacks a pedestrian system with sidewalk connections between residential areas. However, it is now policy of the Metropolitan Planning Organization (MPO) – formed by Hickory, Newton, and Conover – and the North Carolina Department of Transportation (NCDOT) to evaluate any new road construction project for potential pedestrian needs (i.e., sidewalks and crossovers) and bicycle accommodations.



#### 2. Bicycle System

The Plateau SAP study area does not currently have an integrated system of bicycle trails. NCDOT has funded a Bicycle Route Map and signing project that has been underway for several years. In compliance with NCDOT's policy, future road widening projects should be evaluated for their potential to provide bicycle routes.

Note: Since the adoption of the Plateau SAP, the Carolina Thread Trail Plan was adopted by Catawba County in December 2010 to identify future multi-modal trail locations. The Western Piedmont Bicycle Plan is currently being created for the Unifour by the Western Piedmont Council of Governments (WPCOG) to identify needed improvements to existing roadways.

#### 3. Parks and Greenways

Organized recreational activities are very limited in the Plateau area at this time. A youth sports program is run locally at the Banoak Community Center, behind Banoak Elementary School. Other youth sports activities take place at the various schools in the area.

#### Recommendations

- 1. Acreage in single-family subdivisions should be required to be dedicated as common open space. Existing vegetation should be allowed to serve as a buffer.
- 2. Preserve green space specifically for passive recreational uses, including hiking trails, primitive camping areas, canoe access, etc.
- **3.** All cluster subdivisions should require a 30 (thirty)-foot buffer around the perimeter.
- 4. The Plateau SAP supports the bicycle routes that have been submitted to NCDOT for approval. Increase pavement width to the maximum extent feasible along the designated bicycle routes for increased safety.

Note: Since the adoption of the Plateau SAP, the Carolina Thread Trail Plan was adopted by Catawba County in December 2010 to identify future multi-modal trail locations. The Western Piedmont Bicycle Plan is currently being created for the Unifour by the Western Piedmont Council of Governments (WPCOG) to identify needed improvements to existing roadways.



- 5. Establish partnership opportunities between the schools and other community groups to enhance the use of local facilities, such as the Banoak Community Center, for community and recreational activities.
- Work with landowners and local conservancies to establish recreational uses on the Jacobs Fork River. Explore the possibility of developing formal public canoe access, which would alleviate landowners' concerns about trespassing, boater safety, and parking access.
- 7. Explore the adaptive reuse of the southern portion of the Blackburn landfill site for recreational activities, such as a golf course or putt-putt course, hiking, biking and walking trails, picnic areas, a ropes course, and an educational forest.



#### Startown Small Area Plan

#### Study Area (Startown SAP)

The Startown study area encompasses an approximate 20,118 acres of land (including dedicated right-of-ways). It is located south of Hickory, west of Newton and north of Maiden – between US Highway 321-Business and Zion Church Road (and its continuation, called the Hickory-Lincolnton Highway). The US Highway 321-Bypass freeway bisects the SAP, providing easy access to Interstate 85 to the south, and the Blue Ridge Mountains to the north. Significant natural features in the area include the Henry Fork and Jacobs Fork Rivers, which join near the US Highway 321-Bypass at NC Highway 10 and flow south as the South Fork of the Catawba River into Lincoln County.

### Demographics/Projections (Startown SAP)

As shown in Table 3.6.13 below, the population in 2010 is relatively distributed evenly across the individual age groups in the Startown area. This distribution is similar to that of the County as a whole.

Table 3.6.13 Age of Population, 2010

<u> </u>					
Age	Catawba County		Startown		
	Population	% of Population	Population	% of Population	
0 to 4	9,670	6.3%	307	5.5%	
5 to 17	27,125	17.6%	1,081	19.5%	
18 to 44	52,619	34.1%	1,709	30.8%	
45 to 64	43,171	28.0%	1,732	31.2%	
65 and Over	21,773	14.1%	723	13.0%	
Total	154,358	100.0%	5,552	100.0%	

Source: US Census Bureau, WPCOG Data Center, 2014.

As shown in Table 3.6.14 below, the projected growth rate for the County overall is 10.0%; slightly higher than the growth rate of the Startown study area. The study area's net gain of 549 persons represents a 9.9% population gain.



Table 3.6.14 Catawba County SAP Projections

	Catawba	
Year	County	Startown
2010	154,358	5,552
2015	157,872	5,679
2020	161,833	5,822
2025	165,791	5,963
2030	169,751	6,101
Total Growth 2010 to 2030	15,393	549
% Change	10.0%	9.9%

Source: US Census Bureau, NC Office of Management and Budget, and WPCOG Data Center, 2014.

### Key Issues (Startown SAP)

Startown is rural in nature, with vast amounts of open space and very little congestion. It continues to reflect the largely agricultural heritage of the family/neighborhood-oriented community. Traditionally a farming community, it remains very family-oriented, with good schools and protective services. Startown residents enjoy good transportation routes and public services.

Area residents of the Startown SAP met in May of 2004 and participated in small group discussions to identify their likes, dislikes, and future visions of the community. As a result of their discussions, the following broad, categorical issues emerged and later comprised their guiding principles:

- Traffic, especially on Startown Road;
- Fear of annexation;
- Overcrowded schools;
- Unnecessary expansion/extension of highways;
- Loss of farmland and open space;
- Balancing "growth" with rural qualities; and
- Commercial development.

## **Guiding Principles (Startown SAP)**

1. Land Use and Community Design. Realizing that some portions of the Startown study area may be annexed by surrounding municipalities,



residential and commercial growth should be balanced with the rural character of the community – encouraging aesthetically pleasing, affordable housing with the preservation of air quality, sidewalks, trails, and bike paths. Open space, farmlands, and natural resources should be protected and more passive recreation should be developed.

- **Transportation.** Improve communication with NCDOT. Address safety, congestion, growth, policies, stormwater drainage, and connectivity. Increase pedestrian, bicycle, and transit opportunities and investigate a passenger rail connection.
- 3. Community Facilities and Public Services. Provide greater accommodation for school students in community-based, neighborhood areas sharing facilities for recreation, etc. Maintain existing library and emergency services and plan for expansion. Create additional opportunities for active and passive recreation for all population segments in parks and greenways, including conservation easements or greenways along the Henry and Jacobs Fork Rivers and South Fork of the Catawba River.
- 4. Natural and Cultural Resources. Preserve water quality, open space, wildlife habitat, and rural characteristics. Encourage conservation easements or greenways along the Henry and Jacobs Fork Rivers and the South Fork of the Catawba River. Create additional passive recreational opportunities, supplemented by the use of school facilities. Preserve local and national historic properties.

# Specific Needs Assessments as related to Parks & Recreation (Startown SAP)

#### 1. Pedestrian System

Presently, Catawba County does not require sidewalk construction in new developments. In general, the Startown SAP area lacks a pedestrian system with sidewalk connections between residential areas. However, it is now the policy of the Metropolitan Planning Organization (MPO) – formed by Hickory, Newton, and Conover – and the North Carolina Department of Transportation (NCDOT) to evaluate any new road construction project for potential pedestrian needs (i.e., sidewalks and crossovers) and bicycle accommodations.

#### 2. Bicycle System

The Startown SAP study area does not currently have an integrated system of bicycle trails. NCDOT has funded a Bicycle Route Map and



signing project that has been underway since the summer of 2001 and was expected to be completed in 2006.

Note: Since the adoption of the Startown SAP, the Carolina Thread Trail Plan was adopted by Catawba County in December 2010 to identify future multi-modal trail locations. The Western Piedmont Bicycle Plan is currently being created for the Unifour by the Western Piedmont Council of Governments (WPCOG) to identify needed improvements to existing roadways.

#### Recommendations (Startown SAP)

- 1. Provide common open space in residential subdivisions that is easily accessible and usable for recreation.
- 2. Preserve green space specifically for passive recreational uses, including hiking trails, primitive camping areas, canoe access, etc.
- **3.** Work with landowners and local conservancies to establish passive recreational uses and/or boating options on the South Fork River.
- 4. The Startown SAP supports the bicycle routes recommended by the Catawba County Bicycle Mapping Committee, which has been submitted to NCDOT for approval. Increase pavement width to the maximum extent feasible along bicycle routes.

Note: Since the adoption of the Startown SAP, the Carolina Thread Trail Plan was adopted by Catawba County in December 2010 to identify future multi-modal trail locations. The Western Piedmont Bicycle Plan is currently being created for the Unifour by the Western Piedmont Council of Governments (WPCOG) to identify needed improvements to existing roadways.

- **5.** Establish partnership opportunities between the schools and other community groups to enhance the use of local facilities for community and recreational activities.
- **6.** Explore the adaptive reuse of the southern portion of the Blackburn landfill site for recreational activities, such as a golf course or putt-putt course, hiking, biking and walking trails, picnic areas, a ropes course, and an educational forest.



### 3.7 LAKE NORMAN BIKE ROUTE (LNBR)

The Lake Norman Bike Route is a regional bicycle system encompassing Lake Norman in the Southern Piedmont area of North Carolina. These routes generally parallel the major highways, but offer a safer, less traveled alternative than the busy, major roads. The plan brochure identifies places of interest along with their locations along the route.

The plan was created when NCDOT contracted with Centralina Council of Governments (CCOG) in 2009 to devise a regional bicycle plan. CCOG invited the regional transportation entities: Unifour Rural Planning Organization (Catawba County); Lake Norman Rural Planning Organization (Iredell and Lincoln Counties, Mooresville and Troutman) and Mecklenburg-Union Metropolitan Planning Organization (Cornelius, Davidson, Huntersville and Mecklenburg County). Staff from Carolina Thread Trail and NCDOT Divisions 10 and 12 served on the Steering Committee for plan development. In 2010, Catawba County endorsed the plan by Resolution, and NCDOT approved the plan. (See Appendix: Attachment 3 – Lake Norman Bicycle Route Map)

## 3.8 DUKE ENERGY COMPREHENSIVE RELICENSING AGREEMENT

Catawba County participated in Duke Energy's stakeholder process for the FERC relicensing of its hydropower dam facilities on the Catawba River. As part of this process, a comprehensive relicensing agreement was negotiated which included recreational amenities for water-related access and activities. The agreement is still a work in process and has not been finalized as of the writing of this Master Plan. Following is a list of the public amenities included in the relicensing agreement:

- Swim areas on Lake Hickory;
- Canoe/kayak access with picnic sites and trails at a new access site on Lake Hickory;
- Picnic facilities, bank fishing and trails at the existing Oxford access site;
- Public fishing area at the Oxford tailrace;
- Mid-point canoe/kayak access point on Lookout Shoals Lake;



- Financial support for a 1.5 mile walking/hiking trail along the Catawba River extending eastward from Riverbend Park;
- Public fishing area at Lookout Shoals tailrace;
- Trails along Lyle Creek from Hunsucker Park to Lake Norman;
- Financial support for the acquisition of the Mountain Creek tract for a new passive recreation park;
- Picnic facilities, bank fishing and trails at a new access site on Lake Norman; and

See Appendix: Map 9 – Duke Energy FERC Relicensing Recreation Improvements

## 3.9 CATAWBA COUNTY PARKS ENERGY AND RESOURCE CONSERVATION GUIDELINES

Catawba County Parks Division began implementing an Energy and Resource Conservation Plan to coincide with the County's efforts to become more environmentally friendly and responsible. The goals of this plan are to reduce waste output, conserve natural resources, and reduce or eliminate pollutants from the environment either directly or indirectly, by utilizing sound conservation and recycling practices and proactive land and habitat management. Preservation of Catawba County's natural heritage through education and conservation while providing quality passive recreation is the primary mission of Catawba County Parks. Note: Implementation status since the original Parks Master Plan is shown for each recommendation below.

### **Plan Recommendations**

1. Eliminate the use of compressed sodium floodlights in parking areas. Compressed sodium lights adversely affect the photoperiodic cycles of all plant life in the areas. Security lighting should be replaced with motion sensing lights located on all structures and building entranceways.

Implementation – Accomplished

2. Utilize indoor fluorescent lighting or LED's when possible to save energy.

*Implementation* – Accomplished.



 Utilize solar powered spotlighting to enhance roadside signage for patrons. The use of solar powered lights would eliminate the need to run electrical power lines to the site and increase awareness of the park's entrance.

*Implementation* – Accomplished.

4. Utilize motion-censored lighting and exhaust fan controls in restroom facilities.

Implementation - Accomplished.

5. Utilize programmable thermostats in all buildings. Programmable thermostats would enable park staff to maintain a comfortable and energy efficient air temperature during operational hours. This would also maximize energy efficiency while the structures are not in use.

Implementation - Accomplished.

 Utilize recycled paper products in our restrooms and for cleaning purposes. Toilet paper is the most used commodity in our facilities and it would benefit to the environment to use paper products made exclusively from recycled materials.

Implementation: Accomplished.

7. Utilize picnic tables and benches made of recycled materials instead of wood. These products last longer and are not as susceptible to vandalism as their wooden counterparts. It also helps patrons to have tangible evidence of the benefits of recycling. These benches and tables are made by the NC Department of Corrections and are now the standard by the NC Park System. Products manufactured by Corrections Enterprises are available to local government agencies without sales tax or freight charges. Products also include office furniture and miscellaneous supplies.

*Implementation*: As tables and benches require replacement, items or replacement parts are made from recycled plastic materials, and all future benches and tables will be made of recycled materials. The parks will also use recycled plastic material for trail marker posts instead of wooden posts in future facilities.

8. Limit use of asphalt parking areas when feasible and define parking spaces with recycled plastic bumper stops. Asphalt parking areas are



non-porous surfaces that increase erosion and pollution in the immediate areas. Limiting its use can reduce runoff and better control drainage. Using bumper stops would define spaces where patrons would park avoiding confusion and allowing for maximum use of space.

Implementation: Limit use of asphalt when feasible and define parking spaces with recycled plastic bumper stops, prefabricated speed bumps, and bollards. All future park facilities will be evaluated as to the feasibility of using gravel-parking areas instead of asphalt. Gravel parking surfaces can be easily utilized in overflow and bus parking areas. Grade and compaction must continue to meet ADA standards. Concrete and asphalt will be used in turn out traffic patterns and areas subject to erosion. Gravel surface parking is utilized at Riverbend Park for overflow parking and areas that are prone to surface runoff near the river with over 65 spaces in use.

9. Provide recycling bins beside our regular wildlife resistant trash bins throughout the parks major picnic areas to encourage the recycling of cans and plastic bottles.

Implementation: Accomplished.

10. Recover rainwater to irrigate educational gardens, hanging baskets and landscaping around the primary park structures. By using gutter collection barrels to catch the rain and installing 2 to 3 acre ponds and lakes can decrease our dependence on using water from wells and treated water sources. It will also be used as an educational model for patrons to utilize at their own homes.

*Implementation*: The parks will purchase and install the rainwater recovery systems at each park. Educational kiosks will also be installed at each site.

11. Plant deciduous trees on the south side of buildings. This allows the building to have cool shade in summer and warming sunlight in winter.

*Implementation*: The Parks already employ this practice and will continue to do so in future facilities.



- 12. Minimize the clearing of trees for new construction. The fewer trees that are removed, the less impact the building will have on the surrounding environment and its wildlife habitats. Trees and native vegetation also improve water quality and minimize the effects of erosion.
  - *Implementation*: The Parks already employ this practice and will continue to do so in future facilities. When habitats have been impacted, efforts will be made to improve the remaining habitat areas.
- 13. Utilize steel framework and metal roofing in future construction and remodeling. Using steel eliminates dependence on wood and provides for a much stronger structure. Metal roofing replaces asphalt shingles that are petroleum based and wind up in our landfills when removed. Metal construction products can be recycled as scrap metal. Properly installed metal roofing has a very long effective life and can offer much higher insulation value with heat reflective properties.
  - *Implementation*: Future facilities will be constructed in this manner as well as other accepted LEED (Leadership in Energy and Environmental Design) certified practices.
- 14. Create a compost and educational composting facility. Currently, the parks use grass clippings, shredded leaves, shredded paper, and fruit/vegetable scraps to fertilize landscaping plants, reducing the need to use chemical fertilizers that can harm the environment. Shredded office documents that have been printed utilizing vegetable oil inks are easily and beneficially added to compost mixtures. Traditional organic yard waste should be composted on site and this practice encouraged throughout the community to help minimize the handling and transportation of these materials. Transportation to recycling or composting facilities consumes fuel and creates air pollution and in some cases when improperly disposed, it can occupy valuable landfill space.

*Implementation*: Create educational composting facilities at each park to demonstrate the recycling of yard waste and other compostable organic products. Educational kiosk and material would be available at each site.



- 15. Plant gardens to reduce soil erosion and reduce air pollution. Native and non-invasive exotic flower gardens not only attract birds and butterflies, their root systems act as a stronghold on slopes to prevent the soil erosion.
  - *Implementation*: The parks already employ this practice on hillsides and will do so in future facilities. Sustainable landscaping practices are utilized to eliminate the need for synthetic fertilizers and pesticides.
- 16. Limit use and existence of invasive plants. By not planting invasive plants, the parks allow the native flora and fauna to flourish. Existing invasive species should either be controlled or removed if possible.
  - Implementation: Currently, the parks partner with Catawba Valley Community College (CVCC), and Lenoir-Rhyne's biology programs to provide educational experiences that involve projects that help us to remove invasive species from our managed habitat areas. Invasive plant species are able to out compete native vegetation and destroy native natural habitats and communities. Non-native monoculture stands of Loblolly Pine are being removed at Riverbend Park. There are a total of 200 acres in pine plantation. At strategic time intervals, approximately 40 acres will be timbered leaving all native trees and vegetation in place. In 2005, the first 40 acres were timbered and this generated over \$125,000 of revenue for future park development and preservation efforts.
- 17. Provide water, seed, and housing for birds. Attracting more insect consuming birds to the parks decreases the need for pesticide use—a major pollutant to the water and soil. These amenities are educational tools and provide patrons with an opportunity for positive environmental interaction.

*Implementation*: These practices are in place.

18. Hold semi-annual Littersweeps to keep parks and adjoining lands and waterways clean. Currently, the parks participate with Duke Energy and CVCC in these events and will continue to collaborate in the future. The number of volunteers and trash and recyclables recovered at each event on adjoining properties and along the Catawba River has been increasing each year.

*Implementation*: Littersweep events have been taking plane on an ongoing basis.



19. Offer events to increase community participation, education, and awareness about nature, recycling, sustainability, and energy conservation. By holding educational events, the parks staff increases the patron's awareness of our natural heritage and the importance of protecting the environment.

*Implementation*: Educational events will be held as resources and time permit.

20. Study the feasibility and implement all practical LEED (Leadership in Energy and Environmental Design) certification practices on existing park facilities and all new construction. LEED design or "Green Construction" is a logical and practical approach to site design and construction. Many elements are obvious and include materials and design focusing on energy efficiency. Other elements are more complex and address details such as drainage, runoff and open space.

*Implementation*: We will acquire LEED certification and design manuals for evaluation. From these manuals, we will create a practical plan to implement all practical and reasonable practices for renovation of existing facilities and new construction.

The Catawba County Parks Energy and Resource Conservation Plan will be used and reviewed on a regular basis. The Parks Division has been utilizing a number of these practices for years and manages all property with accepted conservation and preservation practices. Through educational opportunities for our patrons and leading by example, we will encourage citizens to become more proactive in positive environmental practices. Catawba County Parks is an effective and appropriate platform for this initiative.

- End of Section -